

**REMARKS**

Claims 5, 8, 11, 12, 14, and 16 have been amended in the application. Claims 1-17 are presented for reconsideration and further examination in view of the following remarks.

In the outstanding Office Action claims 1-17 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of co-pending Application No. 09/891,392; claims 5-17 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite; and the drawings were objected to under 37 C.F.R. 1.83(a).

By this Amendment claims 5, 8, 11, 12, 14, and 16 are amended to overcome the rejections under 35 U.S.C. § 112, second paragraph; a Terminal Disclaimer will be filed in the application which is second to receive a Notice of Allowance to overcome the non-statutory double patenting rejection; and Applicant submits arguments herewith to obviate the objection of the drawings.

It is further respectfully submitted that the within amendments introduce no new matter within the meaning of 35 U.S.C. §132.

**NONSTATUTORY DOUBLE PATENTING REJECTION**

The Examiner provisionally rejected claims 1-17 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of co-pending Application No. 09/891,392.

**RESPONSE**

In response, Applicant will respectfully submit a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) to overcome the rejection based on non-statutory double

patenting if co-pending Application No. 09/891,392 is the first application of the two to receive a Notice of Allowance. Applicant further submits that U.S. Patent Application No. 09/891,392 is commonly owned with this application.

Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

### **REJECTIONS UNDER 35 U.S.C. § 112, 2<sup>ND</sup> PARAGRAPH**

The Examiner rejected claims 5-17 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Specifically, the Examiner found that “the discrete Fourier operation means” in line 23 of claims 5 and 8 lack clear antecedent basis. The last fourteen lines of claim 11, lines 16-27 of claim 12, and the last twenty lines of claims 14 and 16 were found to recite a function without adequate structural basis.

### **RESPONSE**

In response, claims 5 and 8 have been amended to recite --each discrete Fourier operation means-- to correct any perceived antecedent basis issues. Claims 11, 12, 14, and 16 have been amended to include adequate recitations of structure, for example, --...including a first subtractor that subtracts...--; --including a first multiplier that multiplies..., a second multiplier that multiplies..., and a first adder that sums up..., and including a third multiplier that multiplies...,-.

As all of the claims now comply with 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, Applicant respectfully requests that the rejections be withdrawn.

## **DRAWINGS**

The Examiner objected to the drawings under 37 C.F.R. 1.83(a) as not showing the “plural data updating means” of claim 14, lines 12-16.

## **RESPONSE**

In response, Applicant respectfully submits that the “plural data updating means” recited in claim 14 is supported and shown in Figure 5. Specifically, Figure 5 is not merely peculiar to the first embodiment, but is common to both the first embodiment and the second embodiment (see equations (13), (14) in the first embodiment on page 27 and equation (24) in the second embodiment on page 39). Further, Applicant submits that claim 5 is also supported by Figure 5.

In addition, page 43, lines 29-32 of the specification of this application describes that “According to the second embodiment, the Fourier transformation can be carried out to individual frequencies at the same time with the structure shown in Fig. 5 like the first embodiment.”

Therefore, Applicant submits that Figure 5 shows the features recited in claim 14 and that no drawing correction is necessary. Applicant requests that the objection to the drawings be withdrawn.

## **CONCLUSION**

In light of the foregoing, Applicant submits that the application is in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully

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requests that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

Respectfully submitted,

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